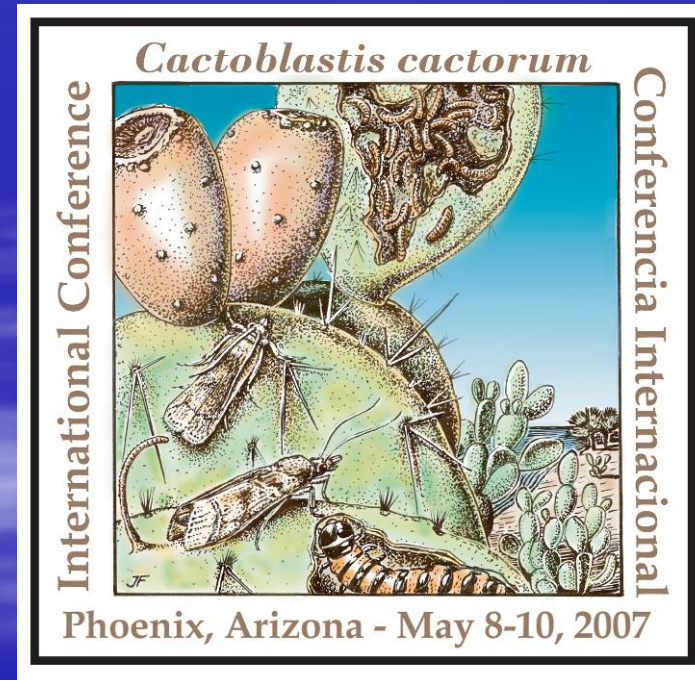


Alabama Field Operations to Eradicate *C. cactorum* Populations on Leading Edge

Operaciones de campo para erradicar C. cactorum del frente de la infestacion en el estado de Alabama

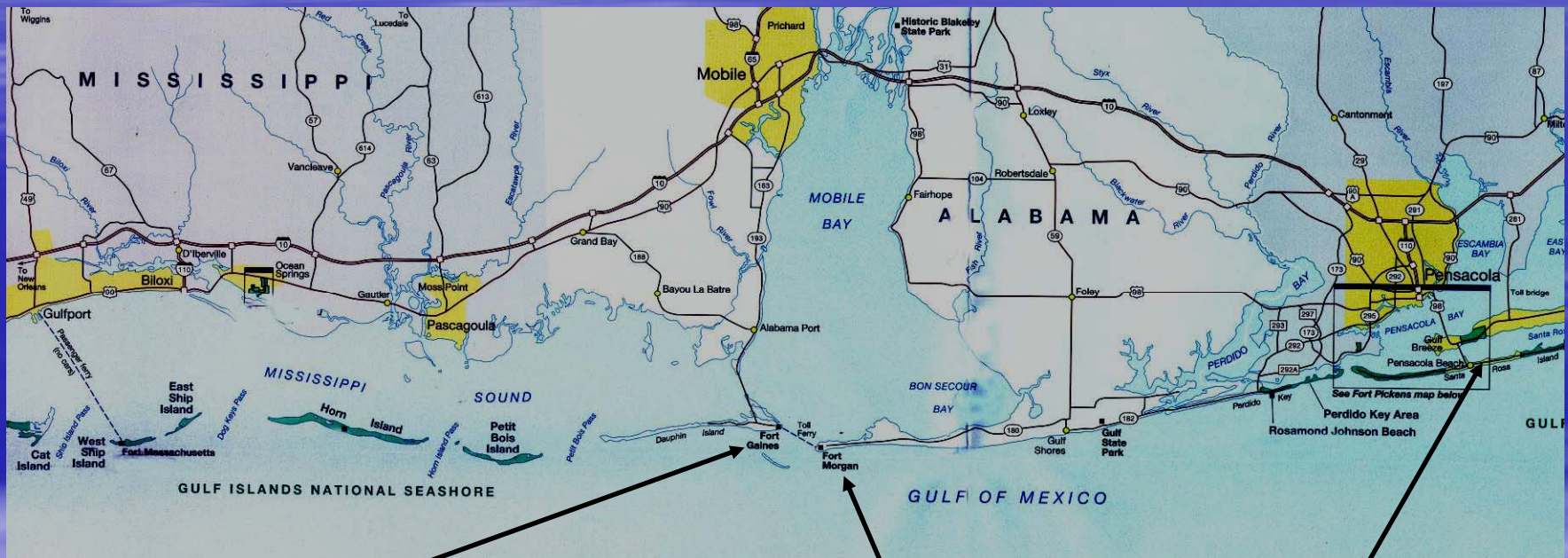
Joel Floyd
Emergency Planning,
Emergency and Domestic Programs
USDA, APHIS, PPQ
Riverdale, MD



Sanitation, Host Removal, Sterile Release



Overview of *C. cactorum* 2006-2007 Control Activities: *Host Removal and Sterile Release*



**Dauphin Island &
Little Dauphin Island,
Alabama**

**Fort Morgan Historic Park &
Bon Secour National Wildlife
Refuge, Alabama**

**Pensacola Beach,
Santa Rosa Island,
Florida**

**ARS Stephen Hight /
crew and PPQ- CPHST
Gulfport Lab**

**PPQ Maurice Duffel and
PPQ TDY personnel
ARS Stephen Hight /crew**

**Scheduled for
2007-2008**

Dauphin Island and Little Dauphin Island Hurricanes Ivan (2004) and Katrina (2005)

A Drifting Island

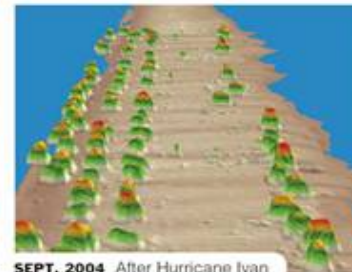
When storms strike barrier islands, like Dauphin Island off the coast of Alabama, they can dramatically reshape the landscape.



Source: United States Geological Survey



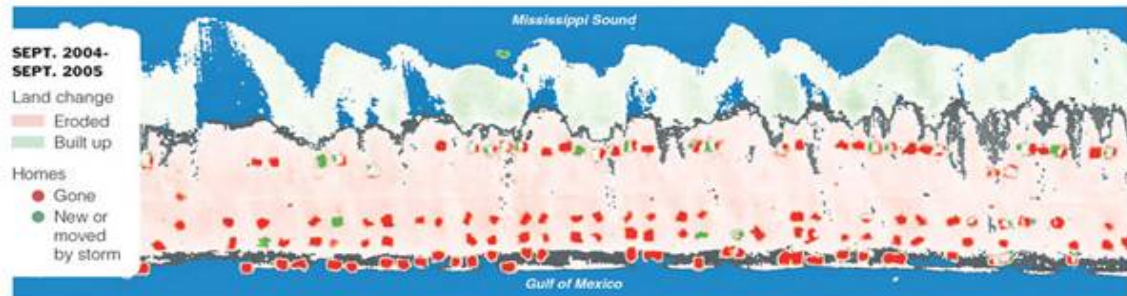
MAY 2004 Before Hurricane Ivan



SEPT. 2004 After Hurricane Ivan



SEPT. 2005 After Hurricane Katrina



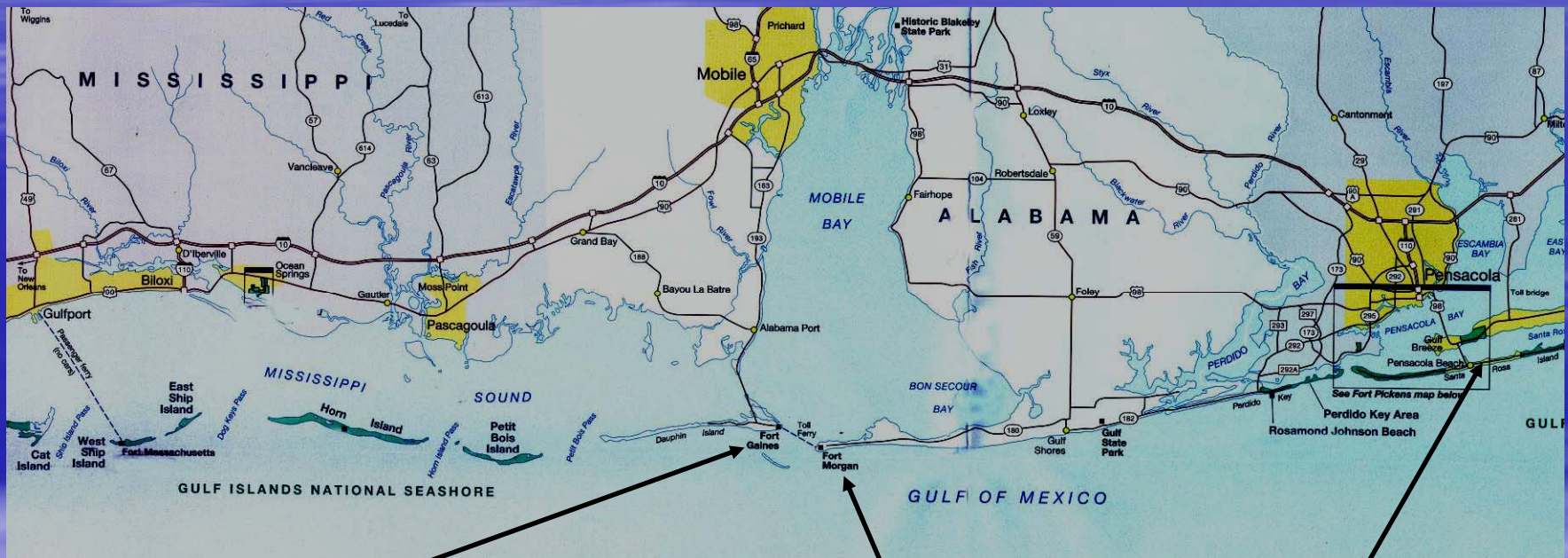
Dauphin Island and Little Dauphin Island



Overview of *C. cactorum*

2006-2007 Control Activities:

Host Removal and Sterile Release



**Dauphin Island &
Little Dauphin Island,
Alabama**

**Fort Morgan Historic Park &
Bon Secour National Wildlife
Refuge, Alabama**

**Pensacola Beach,
Santa Rosa Island,
Florida**

**ARS Stephen Hight /
crew and PPQ- CPHST
Gulfport Lab**

**PPQ Maurice Duffel and
PPQ TDY personnel
ARS Stephen Hight /crew**

**Scheduled for
2007-2008**

Ft. Morgan National Historic Landmark and Bon Secour National Wildlife Refuge



Fort Morgan National Historic Landmark



Fort Morgan National Historic Landmark

- The Battery



Mechanized Removal of Host Material



Mechanized Host Removal

2006: 42 Tons (38 metric tons)

2007 : 50 tons (45 metric tons)



Hand Removal

2006 : 1.9 tons (1.7 metric tons)

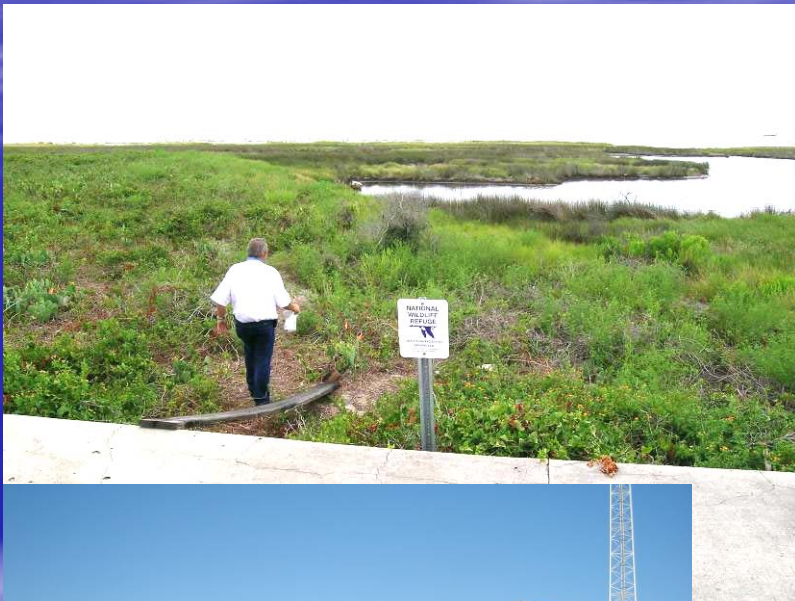


Front End Loader Modification



Bon Secour National Wildlife Refuge

- Below the sea wall

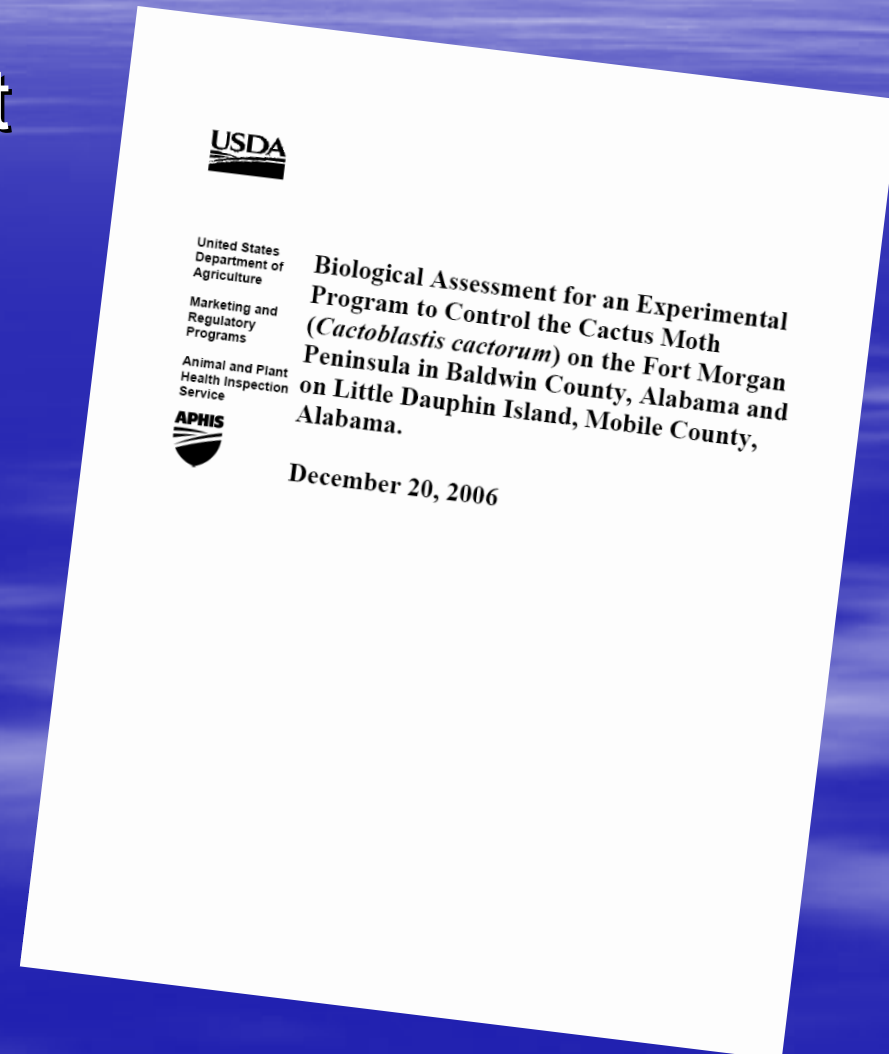


Hand Removal of Host Material Required

Environmental Documentation

Activities: Sterile Release, hand removal, trapping, and mechanized removal

- **Biological Assessment**
 - **Endangered Species Assessment:**
 - Alabama Beach Mouse
 - Least Tern
 - Piping Plover
 - Sea Turtles (3 species)
- **F&WS Consultation**
- **Categorical Exclusion**



Alabama Beach Mouse

- *Peromyscus polionotus ammobates*
- Federally Listed Endangered Species
- Critical Habitat



Source:
US Fish & Wildlife Service

Fort Morgan Environmental Issues

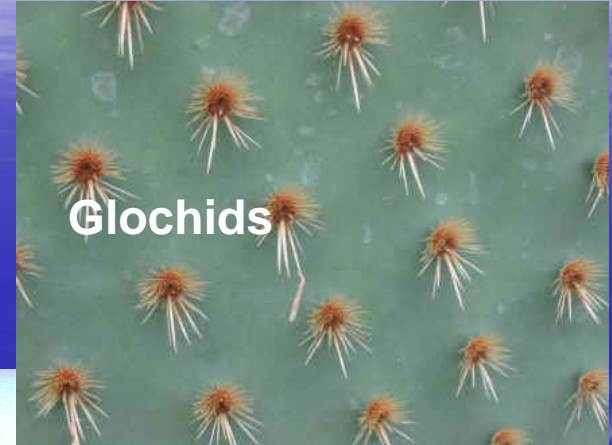
- Alabama Beach Mouse Critical Habitat



Hazards of Host Removal



**Venomous Snakes:
Cottonmouths**



Glochids

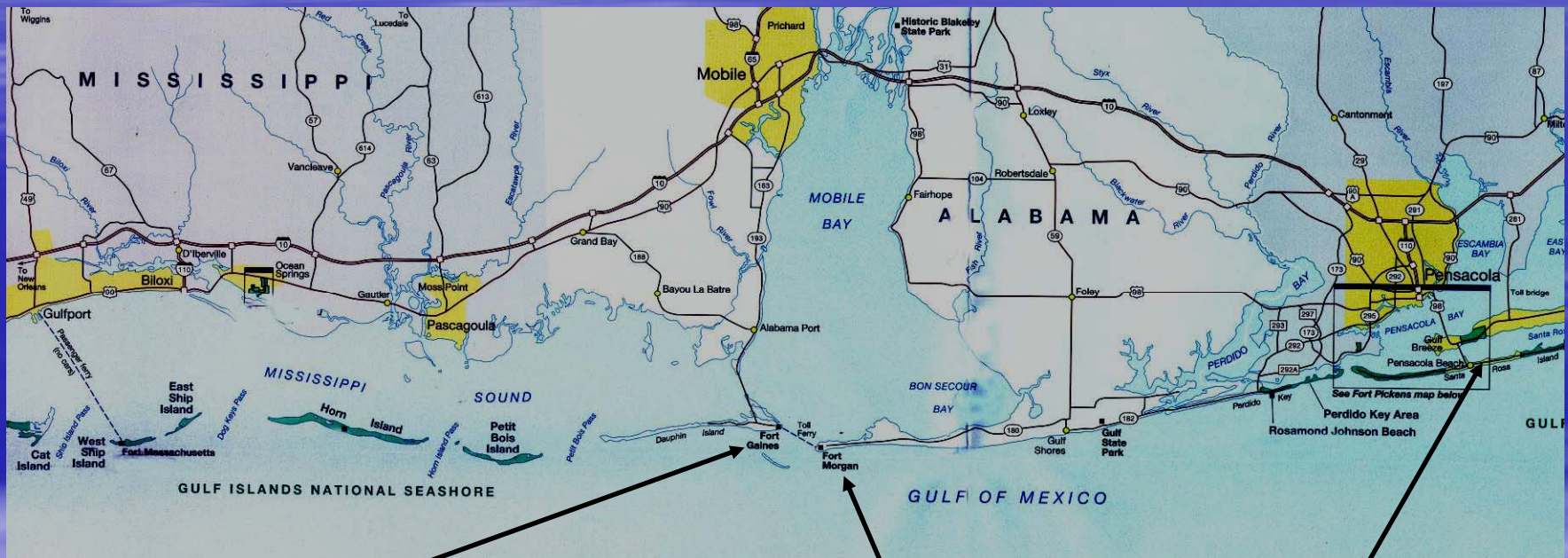


Water spouts

Overview of *C. cactorum*

2006-2007 Control Activities:

Host Removal and Sterile Release



**Dauphin Island &
Little Dauphin Island,
Alabama**

**Fort Morgan Historic Park &
Bon Secour National Wildlife
Refuge, Alabama**

**Pensacola Beach,
Santa Rosa Island,
Florida**

**ARS Stephen Hight /
crew and PPQ- CPHST
Gulfport Lab**

**PPQ Maurice Duffel and
PPQ TDY personnel
ARS Stephen Hight /crew**

**Scheduled for
2007-2008**

Pensacola Beach, Santa Rosa Island, Florida

- Next Area for Control Activities
 - Residential Area – was leading edge in 2004



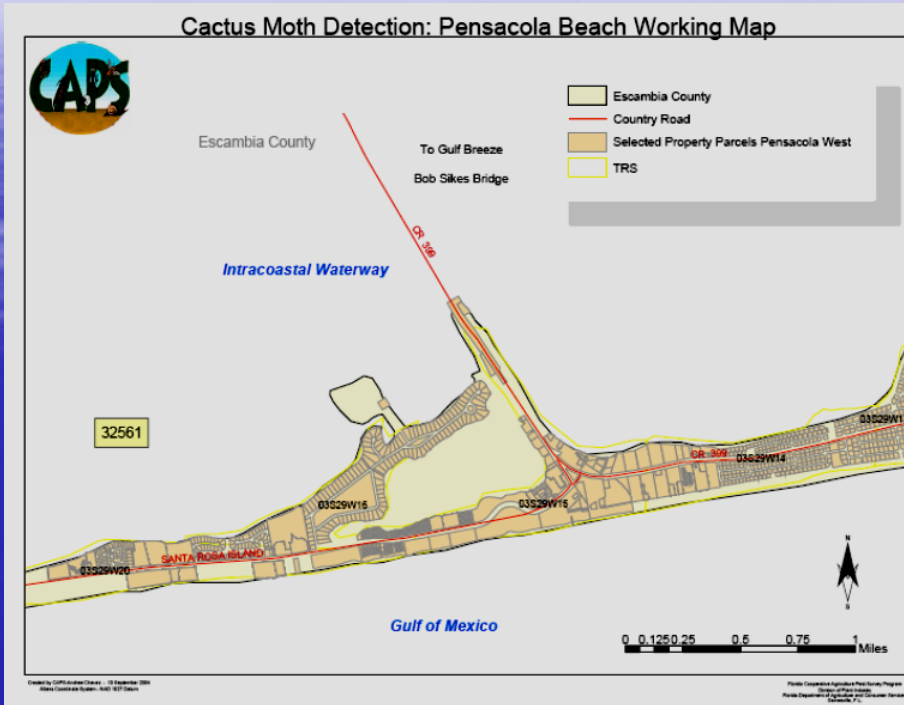
Severely Affected by Hurricanes

- 2004

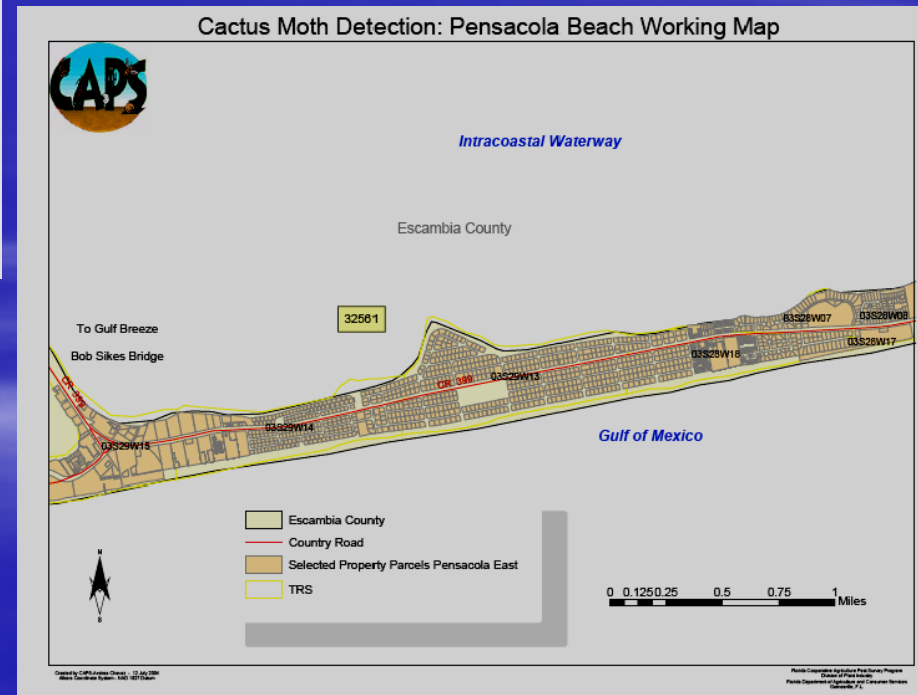
After Hurricane Ivan



Santa Rosa Island, Pensacola Beach



Mapping of residential areas and *Opuntia* locations



Goal: Remove host from population to allow the Sterile Insect Technique work more effectively

Residential host removal, with permission, is voluntary.